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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/197,506 11/23/98 GIOSCIA

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EXAMINER

CHOW, C  
ART UNIT

PAPER NUMBER

2684  
DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/197,506

Applicant(s)

Gioscia et al.

Examiner

First Last

Art Unit

1234

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 25, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other:

*Office Action for  
applicant's amendment  
(June/25/2001)*

1. Regarding applicant's amendment, new prior arts are introduced, from Knox and Takahisa et al., and a non-final office action is released, as indicated in the amendment, for claimed features for the receiving broadcast musical data, and digital audio; the separating data message and digital audio information and transforming to audible sound to speaker; the displaying of the data contextual information; the storing of the contextual information to the removable memory medium.

*Claim Rejections - 35 USC§ 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. (US 5,239,540) in view of Knox (US 6,212,359), and further in view of Takahisa et al. (US 5,577,266).

Rovira et al. discloses **claim 1**, "a method of providing listeners with information about audio programming being digitally broadcast comprising combining a data signal carrying contextual information about said audio programming with an audio signal carrying said audio programming ". See in abstract, in Fig. 1, 5, 6, 8, it shows the apparatus and method for

transmitting, receiving, and communicating the audio broadcast program data signals which are combined with digital data signals, having compressed digital audio multiplexed with the program information, such as the title, the digital audio track, the artist information, the record label, the year, and transmits the combined signals via satellite to a receiving station. The receiving station de-multiplexes signals and sends the combined signal to subscriber's digital tuner for separating the digital audio from the program data. The digital audio is decoded in ASIC, and the program data is processed by the microprocessor. The decoded audio program data is displayed on the display device, while listening to the audio. It also shows in Fig. 7, the input device, keyboard 207, the controlling processor 203, and the display 209 for audio programs. In column 4, line 1-8, it also shows the means of communication could be via wireless communication.

Rovira et al. does not explicitly indicate the receiver for directly receiving the broadcast audio.

Knox discloses "receiving said combined data and audio signals with a receiver; separating said data and audio signals; displaying said contextual information of said data signal on a display device of said receiver", see in abstract, col. 2, line 60 to col. 3, line 3, col. 9, line 55 to col. 10, line 10, it shows the remote digital receiver receives the broadcast digital audio with the program information. It shows at least one receiver/tuner device responsive to the digital audio and program information and corresponding control signals by said controlled device, said program information comprising alphanumeric information. It shows a display for displaying the alphanumeric characters associated with said program information and corresponding selected commands, as shown in claim 1. In abstract, it shows the demodulating of the said combination signals to output music in stereophonic sound,

for separating the data and audio signals and transducing audio to audible sound. In col. 7, line 50-62, it shows the viewing and storing the program information. In col. 8, it shows the digital audio signals is combined with the typical program message including information concerning the composer, the track title, the artist, the album associated with the track title, and custom information for current performance. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Knox's wireless receiver for receiving the digital data and the audio data, demodulating of the combination signal to output music in stereophonic sound and display the corresponding program by means of an alphanumeric display, to Rovira et al., as modified above, such that the user could directly listen to the digital audio with displayed corresponding program.

Rovira et al. as modified above does not explicitly indicate the storing onto removable memory medium.

Takahisa et al. discloses « storing at least a portion of said contextual information of said data signal onto a removable memory medium”, see in abstract, Fig. 2, 10, col. 21, line 32-47, it shows a receiving system storing the data in memory and displaying at user selection of the data corresponding to the program material of the broadcast information. It shows the user could selectively stores the data on a magnetic recording card for electronic coupon or other uses, in abstract, and the memory means for storing said detected associated data as stored associated data, and data card recording means for storage of a portion of said stored associated data on a portable data card responsive to user request, in claim 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Takahisa et al.'s storing user selected data to portable data card,

to Rovira et al., as modified above, such that the audio program information could be more flexible, and conveniently carried by the user for listening the music at other place.

Rovira et al. discloses **claim 2**, "broadcasting said combined data and audio signals as a digital radio signal". See in column 2, line 19-23, and in column 2, line 30-34, it shows the digital transmission information contains the where the audio program information is combined with the digital audio, and the signal transmission can be coaxial cable or via satellite.

Rovira et al. discloses **claim 4**, "display said contextual information of said data signal on a display device of said receiver". See in column 3, line 39-49, in column 8, line 59-68, and in column 9, line 45-55, it shows the processing and displaying of the audio program data for displaying information to user. It shows the separating of program data signal using ASIC and stored the data into internal memory of the microprocessor and sending data to display 209.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of Knox, and further in view of Takahisa et al., and further in view of White et al. (US 5,596,373).

Rovira et al. discloses **claim 3**, "receiving said combined data and audio signals with a receiver; separating said data and audio signals". See in column 2, line 66 to column 3, line 5, it shows the decoding the selected one digital signal and the one corresponding program data signal so as to separate the corresponding program data signal from the selected one digital

signal.

Although Rovira et al. disclosed the converting of the digital audio signal to the left, right audio outputs, utilizing digital to analog converter 160, Rovira et al. does not explicitly indicate the transducing into audible sound.

White et al. teach "receiving said combined data and audio... separating said data and audio signal; transducing said audio signal into audible sound", see in abstract, in column 4, line 14-22, it shows the converting of digital audio signal using D/A to the left, right audio outputs. In column 17; line 15-16, it shows the speaker is utilized for the audio output. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add White et al.'s speaker for digital audio output, to Rovira et al., as modified above, such that the digital audio could be listen by the user.

3. Claims 5-7 are rejected under 35 U. S. C. 103 (a) as being unpatentable over Rovira et al. in view of Knox, and further in view of Takahisa et al., and further in view of Freeny, Jr. (US 5,694,162).

Rovira et al. as modified above does not explicitly indicate the transceiver.

Freeny, Jr. teach **claim 5**, "a transceiver for receiving said broadcast signal", see in title, in abstract, in Fig. 1, in column 2, line 43-65, and in column 3, line 8-20, it shows method and apparatus for automatically changing broadcast programs based on the audience response.

The audience receiver unit 22a, 22 b, receives the broadcast digital program. The audience response unit 24a, 24b transmits the audience user selected program to the broadcast network

control system 14 for subsequently broadcast the user selected audio programs from broadcast network transmitter system 12 of the system 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Freeny, Jr.'s audience receiver 22a, 22b, and response unit 24a, 24b, to Rovira et al. as modified above, such that the user selected audio program could be transmitted to the broadcast network also.

Regarding "a receiver for receiving a broadcasting signal which is an audio signal and a data signal combined, said data signal containing contextual information about audio programming carried by said audio signal"; "a signal processor for separating said audio and data signals; and an audio output device for outputting said audio signal", refer to the patent disclosure discussion in claims 1-4 above for the claimed features.

**Regarding claim 6, 7,** refer to the patent disclosure discussion in claim 1 above which has introduced above, having the disclosed feature for user input device for controlling the display device for textual information, from Rovira et al., as shown in Fig. 7, keyboard 207, processor 203, and display 209.

4. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of Knox, and further in view of Takahisa et al., and further in view of Mankovitz (US 5,703,795).

Rovira et al. as modified above does not explicitly indicate the memory cartridge.



Mankovitz teaches **claim 8**, "a memory cartridge for storing at least a portion of said contextual information of said data signal", see in abstract, in Fig. 3, 4, in column 9, line 7-16, it shows a broadcast system for providing information to the user for identifying the playing station and the time to play the audio program. The broadcast information could be recorded to the memory cartridge tape as shown in Fig. 3, and retrieved from the tape cartridge.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Mankovitz's memory cartridge tape, to Rovira et al. as modified above, such that recorded audio album data could be utilized at other location for replaying of the audio.

**Regarding claims 9, 10**, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.

Rovira et al. teach **claim 11**, "a connection between said processor and a service provider over", see in abstract, in Fig. 1, it shows the method and apparatus for transmitting and receiving the digital data signal for the corresponding broadcasting programs. In column 2, line 19-22, and in column 4, line 5-8, it shows the system is to provide program information for digital audio transmitted to subscribers, and the program information is combined with the digital audio. The communication link could be on the telephone wires, or coaxial cable or wireless means.

Rovira et al. as modified above does not include the transmitting of the selected program.

Freeny, Jr. teach "at least a portion of said contextual information may be transmitted to identify particular audio programming to said service provider", see in column 2, line 43-65, and in column 3, line 8-20, it shows the transmitting of the audience responded selection of audio program to the network system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Freeny, Jr.'s transmitting of the audience responded selection of the audio program to network, to Rovira et al. as modified above, such that the listener' audio selection could be transmitted to the broadcast system for desired audio.

Regarding **claim 12**, refer to the patent disclosure discussion in claim 11 above which also provides the disclosed features for this claim.

Regarding **claim 13**, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.

5. Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of Knox, and further in view of Takahisa et al., and further in view of Takahisa (US 5,579,537).

Rovira et al. as modified above does not explicitly indicate the wireless connection.

Takahisa teaches **claim 14**, "said connection to said service provider is a wireless connection", see in abstract, in column 17, line 46-55, it shows the broadcast system in which digital data are transmitted along with audio. The communication link could be using the wireless link.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Takahisa's wireless link for broadcast audio program data, to Rovira et al. as modified above, such that the audio digital data could be implemented to the wireless communication system.

Regarding **claims 15, 16**, refer to the patent disclosure discussion in claims 1-5 above which also provides the disclosed features for this claim.

Regarding **claims 17, 24**, refer to the patent disclosure discussion in claim 7 above which also provides the disclosed features for this claim.

Regarding **claim 18**, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.

Regarding **claims 19, 21, 22, 26**, refer to the patent disclosure discussion in claims 1-5, 11 above which also provides the disclosed features for this claim.

Regarding **claim 20**, refer to the patent disclosure discussion in claim 4 above which also provides the disclosed features for this claim.

Regarding **claim 23**, refer to the patent disclosure discussion in claims 1, 4 above which also provides the disclosed features for this claim.

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Regarding **claim 25**, refer to the patent disclosure discussion in claims 1, 8 above which also provides the disclosed features for this claim.

***Response to argument  
and  
Conclusion***

8. Applicant's arguments with respect to claim 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant argument about the broadcast of the combination of the digital data and audio data; the receiver receiving the combination of the digital data and the digital audio; the displaying of the characters, contextual information, to the display, the separating, demodulating of the digital audio and output to audible sound; are disclosed by Knox, as shown above. Regarding the removable memory medium for storing data is disclosed by Takahisa et al., as shown above. Thus, the arguments are moot, and claims 1-26 are remaining in the rejection manner.

9. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2684.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Hunter, can be reached at (703)-308-6732.

Any response to this action should be mailed to:

Art Unit: 2684

Commissioner of Patents and Trademarks

Washington D. C. 20231


Or Faxed to: (703)-872-93143 (for formal communications intended for entry)

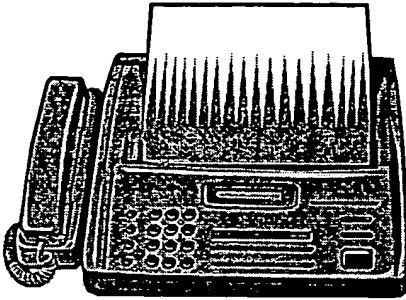
Or hand-delivered to: Crystal Park 11, 2121 Crystal Drive, Arlington, VA, Sixth Floor,  
Receptionist.

For general inquiry or relating to the status of this application should be directed to the Group  
Receptionist whose telephone number is (703)-306-0377.

C. Chow

August/16/2001.

  
DANIEL HUNTER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800



# TELECOPY/FACSIMILE TRANSMISSION COVER SHEET

09/197,506

DATE: Oct-25-2001 (Docket SOA-246)  
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2 due to >  
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Bryan: Attached copy of the office action August/16/2001.  
from your request. Charles 10-25-2001 Thursday

Faxed  
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